CLAIMS

WHAT IS CLAIMED IS:

1. A method for operating an automated data storage library including dual media accessors to transport portable data storage media among sites in the library, where each accessor is associated with an accessor controller and a metadata concerning library properties of prescribed types, and the library additionally contains a version code corresponding to each metadata, the method comprising operations of:

operating both accessor controllers to perform the following management operations, in each case these operations being performed by a subject accessor controller in regard to an other accessor controller and an other version code corresponding to the metadata associated with the other accessor controller:

the subject accessor controller advancing the version code corresponding to the associated metadata in accordance with changes to said metadata;

responsive to predetermined input stimuli, performing operations comprising:

the subject accessor controller retrieving the version code corresponding to the associated metadata;

only if the retrieved version code does not match the other version code, performing operations comprising:

if the retrieved version code is more advanced than the other version code, sending the subject accessor's associated metadata to the other accessor controller;

if the other version code is more advanced than the retrieved version code, receiving the other accessor's associated metadata and utilizing said received metadata to update the subject accessor's associated metadata.

2. The method of claim 1, the operations responsive to the predetermined input stimuli further comprising at least one of the following:

receiving the other version code from the other accessor controller, and comparing the retrieved version code with the other version code;

sending the retrieved version code to the other accessor controller for comparison, and receiving results of the comparison from the other accessor controller.

3. A method of operating an automated data storage library that includes multiple accessors for transporting portable data storage media and, for each accessor, associated components including a controller to manage the media accessor, metadata containing information representing prescribed types of library properties, and a metadata version code, where each controller advances the associated version code in response to changes to said metadata, the method comprising operations of:

responsive to predetermined stimuli, the accessor controllers comparing their associated version codes and if the version codes do not match, updating one of the metadata having a less advanced version code with contents of the other metadata.

4. The method of claim 3,

the library including multiple version codes associated with different subparts of each metadata;

the operations further comprising each controller advancing each version code in accordance with changes occurring to the associated subpart of the corresponding metadata;

the comparing and updating operations being repeated for each version code.

5. The method of claim 3, the metadata of each accessor having multiple subparts each having a different corresponding version code, the method further comprising repeating the management operations on behalf of each metadata subpart and its corresponding version code.

6. The method of claim 3, each version code comprising a subpart of the associated metadata.

7. At least one signal-bearing medium tangibly embodying at least one program of machine-readable instructions executable by one or more digital processing apparatuses to perform operations to manage an automated data storage library including dual media accessors to transport portable data storage media among sites in the library, where each accessor is associated with an accessor controller and a metadata concerning library

properties of prescribed types, and the library additionally contains a version code corresponding to each metadata, the operations comprising:

operating both accessor controllers to perform the following management operations, in each case these operations being performed by a subject accessor controller in regard to an other accessor controller and an other version code corresponding to the metadata associated with the other accessor controller:

the subject accessor controller advancing the version code corresponding to the associated metadata in accordance with changes to said metadata;

responsive to predetermined input stimuli, performing operations comprising:

the subject accessor controller retrieving the version code corresponding to the associated metadata;

only if the retrieved version code does not match the other version code, performing operations comprising:

if the retrieved version code is more advanced than the other version code, sending the subject accessor's associated metadata to the other accessor controller;

if the other version code is more advanced than the retrieved version code, receiving the other accessor's associated metadata and utilizing said received metadata to update the subject accessor's associated metadata.

8. The medium of claim 7, the operations responsive to the predetermined input stimuli further comprising at least one of the following:

receiving the other version code from the other accessor controller, and comparing the retrieved version code with the other version code;

sending the retrieved version code to the other accessor controller for comparison, and receiving results of the comparison from the other accessor controller.

9. At least one signal-bearing medium tangibly embodying at least one program of machine-readable instructions executable by one or more digital processing apparatuses to perform operations to manage an automated data storage library that includes multiple accessors for transporting portable data storage media and, for each accessor, associated components including a controller to manage the media accessor, metadata containing information representing prescribed types of library properties, and a metadata version code, where each controller advances the associated version code in response to changes to said metadata, the operations comprising:

responsive to predetermined stimuli, the accessor controllers comparing their associated version codes and if the version codes do not match, updating one of the metadata having a less advanced version code with contents of the other metadata.

10. The medium of claim 9,

the library including multiple version codes associated with different subparts of each metadata;

the operations further comprising each controller advancing each version code in accordance with changes occurring to the associated subpart of the corresponding metadata;

the comparing and updating operations being repeated for each version code.

11. The medium of claim 9, the metadata of each accessor having multiple subparts each having a different corresponding version code, the operations further comprising repeating the management operations on behalf of each metadata subpart and its corresponding version code.

12. The medium of claim 9, each version code comprising a subpart of the associated metadata.

13. At least one logic circuit of multiple interconnected electrically conductive elements configured to perform operations to manage an automated data storage library including dual media accessors to transport portable data storage media among sites in the library, where each accessor is associated with an accessor controller and a metadata concerning library properties of prescribed types, and the library additionally contains a version code corresponding to each metadata, the operations comprising:

operating both accessor controllers to perform the following management operations, in each case these operations being performed by a subject accessor controller in regard to an other accessor controller and an other version code corresponding to the metadata associated with the other accessor controller:

the subject accessor controller advancing the version code corresponding to the associated metadata in accordance with changes to said metadata;

responsive to predetermined input stimuli, performing operations comprising:

the subject accessor controller retrieving the version code corresponding to the associated metadata;

only if the retrieved version code does not match the other version code, performing operations comprising:

if the retrieved version code is more advanced than the other version code, sending the subject accessor's associated metadata to the other accessor controller;

if the other version code is more advanced than the retrieved version code, receiving the other accessor's associated metadata and utilizing said received metadata to update the subject accessor's associated metadata.

14. At least one logic circuit of multiple interconnected electrically conductive elements configured to perform operations to manage an automated data storage library that includes multiple accessors for transporting portable data storage media and, for each accessor,

associated components including a controller to manage the media accessor, metadata containing information representing prescribed types of library properties, and a metadata version code, where each controller advances the associated version code in response to changes to said metadata, the operations comprising:

responsive to predetermined stimuli, the accessor controllers comparing their associated version codes and if the version codes do not match, updating one of the metadata having a less advanced version code with contents of the other metadata.

15. An automated data storage library, comprising:

library infrastructure including one or more storage slots and one or more media access drives;

dual media accessors to transport removable media about the library infrastructure;

for each accessor, associated components including a controller, metadata containing information representing prescribed types of library properties, and a metadata version code;

the controllers configured to perform operations comprising:

advancing their associated version codes in response to changes to their associated metadata;

responsive to predetermined stimuli, comparing their associated version codes and if the version codes do not match, updating one of the metadata having a less advanced version code with contents of the other metadata.

16. An automated data storage library, comprising:

dual media accessors to transport portable data storage media among sites in the library;

associated with each accessor, a metadata concerning library properties of prescribed types;

a version code corresponding to each metadata;

associated with each accessor, an accessor controller configured to perform management operations, in each case these operations being performed by a subject accessor controller in regard to an other accessor controller and an other version code corresponding to the metadata associated with the other accessor controller, the management operations comprising:

the subject accessor controller advancing the version code corresponding to the associated metadata in accordance with changes to said metadata;

responsive to predetermined input stimuli, performing operations comprising:

the subject accessor controller retrieving the version code corresponding to the associated metadata;

only if the retrieved version code does not match the other version code, performing operations comprising:

if the retrieved version code is more advanced than the other version code, sending the subject accessor's associated metadata to the other accessor controller;

if the other version code is more advanced than the retrieved version code, receiving the other accessor's associated metadata and utilizing said received metadata to update the subject accessor's associated metadata.

17. An automated data storage library, comprising:

library infrastructure including one or more storage slots and one or more data storage drives;

dual media accessor means for transporting removable media about the library infrastructure;

for each accessor means, associated components including metadata containing information representing prescribed types of library properties, and a metadata version code;

controller means for managing the accessors by:

advancing their associated version codes in response to changes to their associated metadata;

responsive to predetermined stimuli, comparing their associated version codes and if the version codes do not match, updating one of the metadata having a less advanced version code with contents of the other metadata.

18. An automated data storage library, comprising:

dual media accessor means for transporting portable data storage media among sites in the library;

associated with each accessor, a metadata concerning library properties of prescribed types;

a version code corresponding to each metadata;

associated with each accessor, an accessor controller means for performing management operations, in each case these operations being performed by a subject accessor controller means in regard to an other accessor controller means and an other version code corresponding to the metadata associated with the other accessor controller means, the management operations comprising:

the subject accessor controller means advancing the version code corresponding to the associated metadata in accordance with changes to said metadata;

responsive to predetermined input stimuli, performing operations comprising:

the subject accessor controller means retrieving the version code corresponding to the associated metadata;

only if the retrieved version code does not match the other version code, performing operations comprising:

if the retrieved version code is more advanced than the other version code, sending the subject accessor means' associated metadata to the other accessor controller;

if the other version code is more advanced than the retrieved version code, receiving the other accessor means' associated metadata and utilizing said received metadata to update the subject accessor means' associated metadata.